

January 17, 2003

**Mr. Mark Sutton
H.H. Sumco, Inc.
1351 Girls School Road
Indianapolis, IN 46231**

**Re: Exempt Construction and Operation Status,
097-16623-00440**

Dear Mr. Sutton:

The application from H.H. Sumco, Inc., received on September 30, 2002, has been reviewed. Based on the data submitted and the provisions in (326 IAC 2-5.1 or 326 IAC 2-5.5), it has been determined that the following electroplating operations, to be located at 1351 Girls School Road Indianapolis, IN 46231 is classified as exempt:

- (a) One (1) plating line, identified as A-Line, with a maximum capacity of 50 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
 - (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) gold plating cell
 - (8) gold plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell

- (b) One (1) plating line, identified as B-Line, with a maximum capacity of 50 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
 - (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) gold plating cell
 - (8) gold plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell

- (c) One (1) plating line, identified as C-Line, with a maximum capacity of 62 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
 - (1) cleaner

- (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) acid bath
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) gold plating cell
 - (9) gold plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) not in use tank
 - (13) not in use tank
- (d) One (1) plating line, identified as D-Line, with a maximum capacity of 62 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) acid bath
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) gold plating cell
 - (9) gold plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) not in use tank
 - (13) not in use tank
- (e) One (1) plating line, identified as Line 1, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) nickel plating cell
 - (9) silver cyanide plating cell
 - (10) silver cyanide plating cell
 - (11) silver cyanide plating cell
 - (12) silver cyanide plating cell
 - (13) silver cyanide plating cell
- (f) One (1) plating line, identified as Line 4, with a maximum capacity of 1250 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath

- (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (g) One (1) plating line, identified as Line 5, with a maximum capacity of 500 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) copper plating cell
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) acid bath
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (h) One (1) plating line, identified as Line 6, with a maximum capacity of 1500 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (i) One (1) plating line, identified as Line 7, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) copper plating cell

- (8) copper plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (j) One (1) plating line, identified as Line 8, with a maximum capacity of 625 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) copper plating cell
 - (8) copper plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (k) One (1) plating line, identified as Line 9, with a maximum capacity of 62 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) acid bath
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) gold plating cell
 - (9) gold plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) not in use tank
 - (13) not in use tank
- (l) One (1) plating line, identified as Line 10, with a maximum capacity of 1250 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) copper plating cell
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) copper plating cell
 - (8) acid bath
 - (9) tin plating cell
 - (10) tin plating cell

- (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (m) One (1) plating line, identified as Line 11, with a maximum capacity of 830 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) copper plating cell
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) copper plating cell
 - (8) copper plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (n) One (1) plating line, identified as Line 12, with a maximum capacity of 1500 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) nickel plating cell
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) acid bath
 - (9) copper plating cell
 - (10) copper plating cell
 - (11) copper plating cell
 - (12) copper plating cell
 - (13) copper plating cell
- (o) One (1) plating line, identified as Line 13, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
- (1) acid bath
 - (2) tin plating cell
 - (3) tin plating cell
 - (4) tin plating cell
 - (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) not in use
 - (13) not in use

- (p) One (1) plating line, identified as Line 14, with a maximum capacity of 750 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) copper plating cell
 - (8) copper plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (q) One (1) plating line, identified as Line 15, with a maximum capacity of 1800 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) not in use
 - (12) not in use
 - (13) not in use
- (r) One (1) plating line, identified as Line 16, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) nickel plating cell
 - (9) silver cyanide plating cell
 - (10) silver cyanide plating cell
 - (11) silver cyanide plating cell
 - (12) silver cyanide plating cell
 - (13) silver cyanide plating cell
- (s) One (1) plating line, identified as Line 17, with a maximum capacity of 3750 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to

stack S5, consisting of the following sequence of tanks:

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) tin plating cell
- (6) tin plating cell
- (7) tin plating cell
- (8) tin plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell

- (t) One (1) plating line, identified as Line 18, with a maximum capacity of 3750 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) tin plating cell
- (6) tin plating cell
- (7) tin plating cell
- (8) tin plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell

- (u) Two (2) natural gas boilers, identified as B1 and B2, with a maximum heat input rate of 5.65 and 7.24 MM Btu/hr, using no control.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations) the PM emissions from the 5.65 and 7.24 MM Btu/hr boilers identified as B1 and B2 shall be limited to 0.51 pounds per MMBtu heat input.

This limitation is based on the following equation:

$Pt = 1.09 / Q^{0.26}$ where Pt = Pounds of particulate matter emitted per million Btu heat input
Q = total source maximum operation capacity rating in million Btu per hour heat input

This exemption revises the previous registration issued to this source. An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed by John Chavez
John Chavez
Administrator
Office of Environmental Services

HMS

cc: cc: file (2 copies)
Mindy Hahn, IDEM

**Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services**

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: H.H. Sumco, Inc.
Source Location: 1351 South Girls School Road, Indianapolis, IN 46231
County: Marion
SIC Code: 3471
Operation Permit No.: 097-16623-00440
Permit Reviewer: Holly M. Stockrahm

The Indianapolis Office of Environmental Services (OES) has reviewed an application from H.H. Sumco, Inc. relating to the construction, reconstruction, and operation of metal strip electroplating operations.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) plating line, identified as A-Line, with a maximum capacity of 50 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
 - (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) gold plating cell
 - (8) gold plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell

- (b) One (1) plating line, identified as B-Line, with a maximum capacity of 50 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
 - (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) gold plating cell
 - (8) gold plating cell
 - (9) tin plating cell
 - (10) tin plating cell

- (11) tin plating cell
- (c) One (1) plating line, identified as C-Line, with a maximum capacity of 62 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
 - (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) acid bath
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) gold plating cell
 - (9) gold plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) not in use tank
 - (13) not in use tank
- (d) One (1) plating line, identified as D-Line, with a maximum capacity of 62 pounds of metal strip per hour, using packed water Scrubber 1 as acid fume control, exhausting to stack S1, consisting of the following sequence of tanks:
 - (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) acid bath
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) gold plating cell
 - (9) gold plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) not in use tank
 - (13) not in use tank
- (e) One (1) plating line, identified as Line 1, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
 - (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) nickel plating cell
 - (9) silver cyanide plating cell
 - (10) silver cyanide plating cell
 - (11) silver cyanide plating cell
 - (12) silver cyanide plating cell
 - (13) silver cyanide plating cell
- (f) One (1) plating line, identified as Line 4, with a maximum capacity of 1250 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
 - (1) cleaner
 - (2) cleaner

- (3) acid bath
 - (4) acid bath
 - (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (g) One (1) plating line, identified as Line 5, with a maximum capacity of 500 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) copper plating cell
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) acid bath
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (h) One (1) plating line, identified as Line 6, with a maximum capacity of 1500 pounds of metal strip per hour, using packed water Scrubber 3 as acid fume control, exhausting to stack S3, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (i) One (1) plating line, identified as Line 7, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) copper plating cell
 - (8) copper plating cell
 - (9) tin plating cell

- (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (j) One (1) plating line, identified as Line 8, with a maximum capacity of 625 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) copper plating cell
 - (8) copper plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (k) One (1) plating line, identified as Line 9, with a maximum capacity of 62 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) acid bath
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) gold plating cell
 - (9) gold plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) not in use tank
 - (13) not in use tank
- (l) One (1) plating line, identified as Line 10, with a maximum capacity of 1250 pounds of metal strip per hour, using packed water Scrubber 4 as acid fume control, exhausting to stack S4, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) copper plating cell
 - (5) copper plating cell
 - (6) copper plating cell
 - (7) copper plating cell
 - (8) acid bath
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (m) One (1) plating line, identified as Line 11, with a maximum capacity of 830 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to

stack S5, consisting of the following sequence of tanks:

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) copper plating cell
- (5) copper plating cell
- (6) copper plating cell
- (7) copper plating cell
- (8) copper plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) tin plating cell
- (13) tin plating cell

- (n) One (1) plating line, identified as Line 12, with a maximum capacity of 1500 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) nickel plating cell
- (5) nickel plating cell
- (6) nickel plating cell
- (7) nickel plating cell
- (8) acid bath
- (9) copper plating cell
- (10) copper plating cell
- (11) copper plating cell
- (12) copper plating cell
- (13) copper plating cell

- (o) One (1) plating line, identified as Line 13, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]

- (1) acid bath
- (2) tin plating cell
- (3) tin plating cell
- (4) tin plating cell
- (5) tin plating cell
- (6) tin plating cell
- (7) tin plating cell
- (8) tin plating cell
- (9) tin plating cell
- (10) tin plating cell
- (11) tin plating cell
- (12) not in use
- (13) not in use

- (p) One (1) plating line, identified as Line 14, with a maximum capacity of 750 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:

- (1) cleaner
- (2) cleaner
- (3) acid bath
- (4) acid bath
- (5) copper plating cell
- (6) copper plating cell

- (7) copper plating cell
 - (8) copper plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (q) One (1) plating line, identified as Line 15, with a maximum capacity of 1800 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) not in use
 - (12) not in use
 - (13) not in use
- (r) One (1) plating line, identified as Line 16, with a maximum capacity of 200 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) nickel plating cell
 - (6) nickel plating cell
 - (7) nickel plating cell
 - (8) nickel plating cell
 - (9) silver cyanide plating cell
 - (10) silver cyanide plating cell
 - (11) silver cyanide plating cell
 - (12) silver cyanide plating cell
 - (13) silver cyanide plating cell
- (s) One (1) plating line, identified as Line 17, with a maximum capacity of 3750 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks:
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell

- (t) One (1) plating line, identified as Line 18, with a maximum capacity of 3750 pounds of metal strip per hour, using packed water Scrubber 5 as acid fume control, exhausting to stack S5, consisting of the following sequence of tanks: [Note: Lines 12 and 13 are combined into one plating machine running the same coil]
- (1) cleaner
 - (2) cleaner
 - (3) acid bath
 - (4) acid bath
 - (5) tin plating cell
 - (6) tin plating cell
 - (7) tin plating cell
 - (8) tin plating cell
 - (9) tin plating cell
 - (10) tin plating cell
 - (11) tin plating cell
 - (12) tin plating cell
 - (13) tin plating cell
- (u) Two (2) natural gas boilers, identified as B1 and B2, with a maximum heat input rate of 5.65 and 7.24 MM Btu/hr, respectively, using no control, exhausting to stacks B1 and B2. [B2 is currently not in use]

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) 5007-01, issued on July 30, 1998, for emission units S1, S3, S4, and S5; and
- (b) 5007-02, issued on July 30, 1998, for emission unit B1.

The source experienced a fire and are constructing replacement tanks for the electroplating operations. No chromium electroplating is performed at this source currently. All conditions from previous approvals were incorporated into this permit.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S1	scrubber	30.75	4	27500	ambient
S3	scrubber	30	3	15000	ambient
S4	scrubber	28.7	3	17600	ambient
S5	scrubber	30.2	4	20000	ambient
B1	boiler	28	1	na	na
B2	boiler	26	1	na	na

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 11, 2002, with additional information received on December 4, 2002.

Emission Calculations

The calculations submitted by the applicant on December 4, 2000, for the plating operations have been verified and found to be accurate and correct. Appendix A (1 page) contains the calculations on combustion.

Plating operations:

Twenty-two (22) nickel plating tanks have emissions of $4.61\text{e-}4$ pounds per hour vented to a scrubber. Calculations show the worst case of 100 % emissions of nickel or 100% emissions of Pb from the nickel plating tanks.

$22 \text{ tanks} * 0.000461 \text{ lb/hr/tank} = 0.01 \text{ lb/hr} = 0.04 \text{ tons per year of Ni or Pb}$

Ten (10) tanks contain silver cyanide with emissions of $2.34\text{e-}5$ pounds per hour vented to a scrubber. Calculations of cyanide emissions (as though 100% of emissions are cyanide) are as follows:

$10 \text{ tanks} * 0.0000234 \text{ lb/hr/tank} = 0.000234 \text{ lb/hr} = 0.001 \text{ tons per year}$

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	0.8
PM-10	0.8
SO ₂	0.0
VOC	0.0
CO	0.3
NO _x	1.2

HAP's	Potential To Emit (tons/year)
cyanide	0.03
lead	0.29
nickel	1.31
TOTAL	1.63

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of the pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 1.1-3.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the application data.

Pollutant	Actual Emissions (tons/year)
PM	0.07
PM-10	0.07
SO ₂	0.01
VOC	1.36
CO	0.27
NO _x	0.07
combined HAPs	< 1.0

No previous emission data has been received from the source.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment or unclassifiable
SO ₂	attainment or unclassifiable
NO ₂	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.07
PM10	0.07
SO ₂	0.01
VOC	0.03
CO	0.27
NO _x	1.36

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the application submitted by the company.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit CP-097-16623-00440, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OES inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. The boilers are less than 10 MM Btu/hr, therefore, 40 CFR 60, Subparts Da, Db, or Dc, are not applicable
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source. There is no chromium electroplating performed at this source, therefore, 40 CFR 60, Subpart N, does not apply.

State Rule Applicability - Entire Source

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations) the PM emissions from the 5.65 and 7.24 MM Btu/hr boilers identified as B1 and B2 shall be limited to 0.51 pounds per MMBtu heat input.

This limitation is based on the following equation:

$$Pt = 1.09 / Q^{0.26}$$

where Pt = Pounds of particulate matter emitted per million Btu heat input
Q = total source maximum operation capacity rating in million Btu per hour heat input

326 IAC 6-3

The plating operations is dip coating and, therefore, exempted from the requirements of 326 IAC 6-3.

Conclusion

The construction and operation of this electroplating operation shall be subject to the conditions of the attached proposed Exemption 097-16623-00440.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 10

Company Name: HH Sumco, Inc.
Address City IN Zip: 1351 Girls School Road, Indianapolis, IN 46231
R: 097-16623-440
Reviewer: Holly M. Stockrahm
Date: December 10, 2002

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

12.9

112.9

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	13.7	13.7	0.6	100.0	5.3	21.0
Potential Emission in tons/yr	0.8	0.8	0.0	5.6	0.3	1.2

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton